MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Atlantic Air Products

New Hampshire Manufacturing Extension Partnership

Breathing Easier With Lean at Atlantic Air Products

Client Profile:

Atlantic Air Products (AAP) manufactures a complete line of high-quality sheet metal products, duct system components and accessories for the HVAC industry. Their plant in Bow, New Hampshire employs 24 people and houses a state-of-the-art manufacturing and distribution facility. AAP manufactures complete sheet metal duct systems direct for contractors throughout the New England states and offers its line of takeoff collars and components through distributors nationwide.

Situation:

AAP's owner Skip Creamer learned of an Introduction to Lean Workshop (TimeWise LE 102) being offered to the public by the New Hampshire Manufacturing Extension Partnership (NHMEP), a NIST MEP network affiliate. With his background in mechanical engineering and operations, Skip had a basic understanding of Lean concepts and was interested in how they could be applied to his business.

Solution:

Project manager Jane T. Ely introduced NHMEP's programs as well as government programs aimed at creating and maintaining manufacturing jobs within New Hampshire. AAP applied for and received a grant for employee training from the Workforce Opportunity Council. A plan to apply Lean techniques to the Atlantic operation was established jointly by AAP and NHMEP. Project work began with a TimeWise LE102, at their facility in Bow, where 12 employees from both the office and the shop floor gathered along with participants from other New Hampshire companies, to learn basic Lean principles using both classroom instruction and hands-on simulations. Next, AAP Atlantic Air undertook a VSM (value stream mapping) event. Jane worked with a team of employees on the company's HETD (high efficiency take-off collar with damper) manufacturing line, where demand had begun to exceed capacity. By following the production process from beginning to end, the team was able to discover inefficiencies and develop a continuous improvement plan to eliminate them. The team also completed a 5S Kaizen event which uses a systematic approach to workplace organization. They cleaned and organized the space, changed the plant layout and streamlined material and operator travel. The goal was to increase throughput in order to satisfy customer demand. Lean principles were applied to evolve the process from batch production to one utilizing a pull system with one piece flow. VSM illustrated bottlenecks in production which were alleviated by maximizing the use of key pieces of equipment.

Results:

- * Improved workplace organization by 41 percent.
- * Reduced travel time by 45 percent.



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- * Increased throughput by 75 percent.
- * Created 4 new jobs.
- * Achieved a more competitive and profitable position.

Testimonial:

"I would strongly recommend working with NHMEP to any manufacturing operation. With their assistance, we have been able to gain market share in a very competitive industry while continuing to manufacture our products in America with unionized labor. There is a nice balance between providing opportunities for individuals to earn a good living and achieving success in the marketplace."

Skip Creamer, Owner

